

SEAMING BOARD AND METHODS OF INSTALLING FLOOR COVERING

Invented by

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208270" T6025007

1 SEAMING BOARD AND METHODS OF INSTALLING FLOOR COVERING

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3 Field of the Invention

4

5 This invention relates to floor covering installation  
6 equipment and to methods of installing floor covering.

7

8 Background of the Invention

9

10 Installing carpet is a laborious task and the art is  
11 replete with tools specifically designed to facilitate and  
12 hasten carpet installation. Of the various tools available  
13 for carpet installation is the seaming board, which is a  
14 long flat board that is placed on the carpet padding  
15 between edges of adjacent carpet sections. Seam tape is  
16 disposed on the board, which is heated with an iron. After  
17 the seam tape is sufficiently activated in which the  
18 adhesive of the seam tape is melted, the iron is removed  
19 and portions of the opposing edges are pressed onto the  
20 activated portion of the seam tape, joining the portions of  
21 the opposing edges of the carpet sections together. A  
22 weight is usually applied in order to permit the melted  
23 adhesive to impregnate the underlayment of the carpet and  
24 to increase adhesion. This process is repeated until the

1 edges of the carpet sections are joined together, in which  
2 a seam is produced. The seaming board prevents the  
3 adhesive from impregnating the carpet padding and prevents  
4 the carpet padding from becoming burned and damaged from  
5 the iron during this installation process, and provides a  
6 working area for safely activating the seam tape.

7

8 Using a seaming board, while important, is cumbersome.  
9 After a portion of the seam tape is activated, the seaming  
10 board must be advanced in order to activate the additional  
11 portions of the seam tape. Advancing the seaming board is  
12 usually done by hand, in which the seaming board is taken  
13 up by hand and advanced. This is inefficient, cumbersome,  
14 frustrating and time consuming, adding valuable time to the  
15 carpet installation process. Sometimes, a rope is tied to  
16 one end of the seaming board, in which one worker pulls on  
17 the seaming board with the rope advancing it while another  
18 worker mans the iron activating the seam tape and joining  
19 the edges of the opposing carpet sections together. This  
20 method is inefficient, as it requires two workers.

21

22 Given these and many other deficiencies in the art of  
23 seaming boards, there is a need for a new and improved  
24 seaming board that is easy to make, easy to use,

1 inexpensive, highly efficient and that incorporates useful  
2 features for hastening and improving the efficiency of the  
3 joining the edges of opposing carpet sections in a carpet  
4 installation procedure.

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1 the abutment structure, securing the pivoted elements in  
2 the closed condition.

3

4 Another embodiment of the invention is a seaming board  
5 that includes opposing ends, opposing sides, opposing upper  
6 and lower major surfaces and attached abutment structure.

7 The abutment structure is attached at the opposing sides of

8 the seaming board proximate one of the opposing ends, and

9 is adjustable between a closed condition opposing the upper

10 surface and an open condition away from the upper surface

11 and the opposing sides of the seaming board. In its closed

12 condition, the abutment structure is capable of receiving a

13 forcible impulse by an implement, such as an iron,

14 advancing along the upper surface of the seaming board.

15 The abutment structure consists of a first element pivoted

16 to one of the opposing sides of the seaming board and an

17 opposing second element pivoted to the other of the

18 opposing sides of the seaming board. The first and second

19 elements are capable of being pivoted between the closed

20 condition opposing the upper surface and the open condition

21 splayed away from the upper surface. An engagement occurs

22 between the first and second elements in the closed

23 condition of the abutment structure. Preferably, one of

24 the first and second elements is fashioned with a

1 receptacle, which receives the other of the first and  
2 second elements in the closed condition of the abutment  
3 structure, securing the pivoted elements in the closed  
4 condition.

5  
6 Yet another embodiment of the invention consists of a  
7 seaming board including opposing ends and opposing upper  
8 and lower major surfaces, an attached iron and attached  
9 abutment structure. In this embodiment, the iron includes  
10 a force applying end and is disposed against the upper  
11 surface, usually applied directly to seam tape disposed on  
12 the upper surface of the seaming boarding in a carpet  
13 installation process. The abutment structure is attached  
14 to the seaming board proximate one of the opposing ends and  
15 is adjustable between a closed condition engaging the force  
16 applying end of the iron and an open condition away from  
17 the force applying end of the iron. The abutment structure  
18 consists of a first element pivoted to one of the opposing  
19 sides of the seaming board and an opposing second element  
20 pivoted to the other of the opposing sides of the seaming  
21 board. The first and second elements are capable of being  
22 pivoted between the closed condition opposing the upper  
23 surface engaging the force applying end of the iron and the  
24 open condition splayed away from the upper surface. An

1 engagement occurs between the first and second elements in  
2 the closed condition of the abutment structure.  
3 Preferably, one of the first and second elements is  
4 fashioned with a receptacle, which receives the other of  
5 the first and second elements in the closed condition of  
6 the abutment structure, securing the pivoted elements in  
7 the closed condition.

8

9 Consistent with the foregoing, the invention also  
10 contemplates associated methods.



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BRIEF DESCRIPTION OF THE DRAWINGS

Referring to the drawings:

FIG. 1 is a perspective view of a seaming board incorporating abutment structure, in accordance with the principle of the invention, the seaming board shown as it would appear in use in a carpet installation procedure;

FIG. 2 is a top plan of the seaming board of FIG. 1;

FIG. 3 is a side elevation of the seaming board of FIG. 1;

FIG. 4 is perspective view of the seaming board of FIG. 1 shown as it would appear in use in a carpet installation procedure;

FIG. 5 is a fragmented perspective view of the seaming board of FIG. 1; and

FIG. 6 is a perspective view of the seaming board of FIG. 1 shown as it would appear in use in a carpet installation procedure.

## 1            DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

2

3            Turning now to the drawings, in which like reference  
4 characters indicate corresponding elements throughout the  
5 several views, attention is first directed to FIG. 1 in  
6 which is seen a seaming board, embodying the principle of  
7 the instant invention, generally indicated by the reference  
8 character 10 and shown as it would appear in use in a  
9 carpet installation procedure. Looking momentarily to FIG.  
10 2, seaming board 10 is an elongate, rectangular generally  
11 flat panel 11 having opposing ends 12,13, opposing sides  
12 14,15, opposing upper and lower major surfaces 16,17 (lower  
13 surface 17 is denoted only in FIG. 3) and attached abutment  
14 structure 20 disposed proximate end 12. Like most seaming  
15 boards, in size panel 11 is preferably approximately 8  
16 inches wide and 30 inches long. However, panel 11 can be 6  
17 inches wide and 30 inches long, 4 inches wide and 48 inches  
18 long, 6 inches wide and 48 inches long, etc. Those having  
19 regard for the art will appreciate that panel 11 can be of  
20 any suitable width and length depending on specific needs  
21 and specific carpet installation requirements. Panel 11 is  
22 constructed of any suitable material commonly found in  
23 conventional seaming boards, such as thin plywood or  
24 paneling, aluminum, aluminum coated material, etc.

1 Opposing minor edges characterize ends 12,13 and opposing  
2 major edges characterize sides 14,15. End 12 is a leading  
3 end of seaming board 10 and end 13 is a trailing end of  
4 seaming board 10.

5

6 In the present embodiment, abutment structure 20 is  
7 attached to panel 11 proximate end 12, which is the leading  
8 end of seaming board 10 as previously explained, and is  
9 adjustable between a closed condition (FIGS. 1-4) opposing  
10 upper surface 16 and an open condition (FIGS. 5 and 6) away  
11 from upper surface 16. In its closed condition, abutment  
12 structure 20 is capable of receiving a forcible impulse  
13 thereagainst by an implement, such as an iron, advancing  
14 along upper surface 16 of seaming board 10 between end 13  
15 and abutment structure 20 in a direction toward end 12 in a  
16 carpet installation procedure, and this will be more fully  
17 explained later in this specification.

18

19 In this specific embodiment, abutment structure 20  
20 consists of opposing pivoted elements 21,22, which are  
21 capable of being pivoted between the closed condition  
22 (FIGS. 1-4) opposing upper surface 16 proximate end 12 and  
23 the open condition (FIG. 5 and 6) splayed away from upper  
24 surface 16 projecting outwardly from sides 14,15,

1 respectively. Elements 21,22 are substantially equally  
2 sized and shaped and fashioned of plastic, metal or other  
3 substantially rigid material or combination of materials.  
4 Elements 21,22 are each integrally fashioned, but each can  
5 be assembled from two or more parts if desired. Element 21  
6 is elongate and generally flat including a proximal end 30  
7 pivoted at side 14 and an opposing distal end 31. Proximal  
8 end 30 is attached to a hinge 32, which permits it to  
9 pivot. Hinge 32 is conventional in structure, is disposed  
10 immediately outboard of side 14 and is fastened to a plate  
11 33 (FIG. 1), which overlies a portion of lower surface 17  
12 and is secured thereto with screws, adhesive, rivets, or  
13 other suitable fastening mechanism. Hinge 32 can be  
14 attached in other ways in accordance with the ordinary  
15 skill attributed to artisans devoted to the art. Similar  
16 to element 21, element 22 is elongate and generally flat  
17 including a proximal end 40 pivoted at side 15 and an  
18 opposing distal end 41. Proximal end 40 is attached to a  
19 hinge 42, which permits it to pivot. Hinge 42 is  
20 conventional in structure, is disposed immediately outboard  
21 of side 15 and is fastened to a plate (not shown), which  
22 overlies a portion of lower surface 17 and is secured  
23 thereto with screws, adhesive, rivets, or other suitable  
24 fastening mechanism. Hinges 42 can be attached in other

1 ways in accordance with the ordinary skill attributed to  
2 artisans devoted to the art.

3

4 An engagement of elements 21,22 occurs in the closed  
5 condition of abutment structure 20, securing or otherwise  
6 maintaining elements 21,22 in the closed condition.

7 Preferably, and with regard to FIG. 1, element 21 carries a

8 receptacle 50 (see also FIG. 5), which is disposed

9 proximate distal end 30 and essentially a narrow slot that

10 extends into an edge of element 21. In the closed

11 condition of elements 21,22, an edge of element 22 is

12 disposed into receptacle 50 and this is done by manual

13 manipulation, disposing and securing elements 21,22 in the

14 closed condition. The closed condition of elements 21,22

15 is characterized by a triangular disposition of elements

16 21,22 disposed adjacent and extending away from upper

17 surface 16 and this is readily appreciated in FIGS. 1 and

18 4. Although receptacle 50 faces end 12, it can be disposed

19 to face end 13. Receptacle 50 can be positioned elsewhere

20 along element 21 as desired so that it capable of securing

21 element 22 in the closed condition so as to produce the

22 triangular disposition of elements 21,22. Receptacle 50

23 can also be carried by element 22 if desired, rather than

1 element 21. In other words, the nature of the engagement  
2 between elements 21,22 can be reversed.

3

4 Looking back to FIG. 1, seaming board 10 is useful for  
5 installing carpet and, more particularly, for joining edges  
6 60,61 of adjacent carpet sections 62,63 in a carpet  
7 installation procedure. In use, seaming board 10 is placed  
8 on the carpet padding between edges 60,61 of carpet  
9 sections 62,63. Lower surface 17 of panel 11 is disposed  
10 against the carpet padding and conventional seam tape 64 is  
11 positioned upon upper surface 16, extending longitudinally  
12 along upper surface 16 generally from end 13 to end 12 and  
13 forwardly of end 12 as illustrated. Abutment structure 20  
14 is disposed in its closed condition and seam tape 64 passes  
15 beneath it upon upper surface 16. A seam iron 65, which  
16 can be any conventional seam iron well known in the art, is  
17 disposed against upper surface 16 and, more particularly,  
18 against seam tape 64 rearward of abutment structure 20,  
19 i.e., toward end 13. With seam iron 65 disposed in an  
20 energized condition generating heat, seam iron 65 is  
21 maintained against a portion of seam tape 64 for a time  
22 period that is sufficient to activate seam tape 64, i.e.,  
23 to dispose the adhesive of seam tape 64 in a softened or  
24 melted condition. After the portion of seam tape 64 is

1 activated, seam iron 65 is advanced by hand toward abutment  
 2 structure 20 for the purpose of activating another portion  
 3 of seam tape 64. While another portion of seam tape 64 is  
 4 being activated by seam iron 65, edges 60,61 of carpet  
 5 sections 62,63 are disposed against one another and pressed  
 6 against the activated portion of seam tape 64, adhesively  
 7 joining together those portions of edges 60,61 of carpet  
 8 sections 62,63 producing a joined seam portion. A weight  
 9 is usually applied in order to permit the melted adhesive  
 10 to impregnate the underlayment of the carpet and to  
 11 facilitate adhesion. After suitable adhesion takes place,  
 12 which usually occurs within only a few minutes, the weight  
 13 is removed. Seaming board 10 prevents the adhesive of seam  
 14 tape 64 from impregnating the carpet padding and prevents  
 15 the carpet padding from becoming burned and damaged from  
 16 the iron during this installation process, and provides a  
 17 working area for safely activating seam tape 64.

18

19 This process is repeated until the full length of  
 20 edges 60,61 of carpet sections 62,63 are joined together,  
 21 in which a seam is produced attaching carpet sections  
 22 62,63. It is important to understand, in accordance with  
 23 the principle of the invention, that seam iron 65 includes  
 24 a force applying end 66 that faces and opposes abutment

1 structure 20 in its closed condition and this is readily  
 2 appreciated in FIG. 1. As seam iron 65 is advanced by hand  
 3 by a devoted worker, force applying end 66 will eventually  
 4 contact or engage elements 21,22 of abutment structure 20  
 5 (FIG. 4), facilitating an application of a forcible impulse  
 6 thereagainst to cause advancement of seaming board 10  
 7 relative to carpet sections 62,63 and seam tape 64. And so  
 8 by applying a forcible impulse against elements 21,22 of  
 9 abutment structure 20 with force applying end 66 of seam  
 10 iron 65, seaming board 10 is advanced forwardly as the  
 11 process of activating seam tape 64 and joining edges 60,61  
 12 together is repeated in the process of joining edges 60,61  
 13 together.

14  
 15 As seaming board 10 is so advanced in the course of a  
 16 carpet installation procedure as described, end 12 may be  
 17 caused to be moved against a marginal straight edge,  
 18 namely, a wall 70 as denoted in FIG. 6. At this point,  
 19 abutment structure 20 is capable of being moved into its  
 20 open position by taking up elements 21,22, disengaging them  
 21 and pivoting then away from upper surface 16 out of  
 22 engagement with force applying end 66 of seam iron 65 so as  
 23 to be splayed outwardly projecting away from sides 14,15,  
 24 respectively, so as to underlie carpet sections 62,63,



1 which are shown in phantom outline. This is readily  
2 depicted in FIG. 6. This orientation of seaming board 10  
3 permits the advancement of seam iron 65 along upper surface  
4 16 of seaming board 10 up to end 12 disposed against or  
5 otherwise adjacent wall 70 without impediment, permitting  
6 that portion of seam tape 64 there occupying to be  
7 activated for joining the terminal portions of edges 60,61  
8 of carpet sections 62,63 disposed toward wall 70 without  
9 having to first remove seaming board 10 or struggle with  
10 it. After the terminal portions of edges 60,61 sealed  
11 together, the carpet can be peeled back and seaming board  
12 10 removed for reuse. The structural combination of  
13 seaming board 10 including abutment structure 20, and seam  
14 iron 65, wherein abutment structure 20 is movable from its  
15 closed condition engaging force applying end 66 of seam  
16 iron 65 to its open position disengaged from force applying  
17 end 66 of seam iron 65 as herein described, is considered  
18 an embodiment of the invention in accordance with the  
19 principles and advantages attributed thereto in this  
20 specification.

21  
22 Another beneficial feature of the invention is that  
23 elements 21,22 can, rather than be engaged in the closed  
24 condition as herein described, be disposed directly against

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1 upper surface 16 of panel 11 one atop the other, i.e., in  
2 an overlapping condition. Laying flat against upper  
3 surface 16 in this way allows seaming board 11 to be easily  
4 and conveniently stored during periods of nonuse, taking up  
5 very little space. The disposition of the pivoted  
6 attachment of elements 21,22 permits elements 21,22 to be  
7 disposed directly against upper surface 16 in an  
8 overlapping state.

9

10 The present invention is described above with  
11 reference to a preferred embodiment. However, those  
12 skilled in the art will recognize that changes and  
13 modifications may be made in the described embodiments  
14 without departing from the nature and scope of the present  
15 invention. Various changes and modifications to the  
16 embodiment herein chosen for purposes of illustration will  
17 readily occur to those skilled in the art. To the extent  
18 that such modifications and variations do not depart from  
19 the spirit of the invention, they are intended to be  
20 included within the scope thereof.

21

22 Having fully described the invention in such clear and  
23 concise terms as to enable those skilled in the art to  
24 understand and practice the same, the invention claimed is: